IMPORTANT UPDATES!
Be sure to review update on page 1 and changes to sections #1, #6 and #6.2.

Installation Instructions

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IMPORTANT UPDATE: GREEN LIGHT

We wanted to let you know about some important improvements Guidepoint is making to the GPS-SID in order to make the program more successful for you. The company recently implemented some software changes to improve the testing procedure that needs to be completed at the time of activation. The new changes now test the system for:

1. Power – ensures there is a proper connection to power, no shorts, etc.

2. GPS – tests the GPS receiver and ensures that the antenna is installed properly.

3. Cellular – tests the wireless modem by performing a “handshake” with the towers.

If all three of these elements are working correctly, you will receive a GREEN LIGHT from the unit. You must have seen a green light during the testing procedure before you can activate the unit.
1. Introduction

This manual covers the installation of the Guidepoint Control Module. This manual is for the professional and novice installer and should be used to ensure a safe and functional install of the Guidepoint Control Module. **To ensure the unit works properly, it is critical that each unit be tested according to the protocol outlined in step 5.** You must obtain a green light during the test process to ensure that the critical elements (power, GPS, modem, software) are functioning properly.

NOTE: YOU MUST RECEIVE A GREEN LIGHT TO VERIFY INSTALLATION PRIOR TO ACTIVATING THE UNIT.

2. Safety statement

***Always disconnect the vehicle battery while installing this or any other automotive electronic product.

This product is connected directly to the vehicle’s 12-volt system. There is no on-off switch on the unit. The installed unit operates 24 hours a day and must be energized to log vehicle events or send data as required by anyone using the service.

The Guidepoint Control Module is shipped with one in-line 3-amp fuse attached to the power cable. This fuse must be installed as close as possible to the primary 12-volt source connection. The fuse protects the power cable should there be a short in the cable between the fuse and the Control Module. **This fuse must be installed properly.** If the fuse is replaced, it should be of the same type as originally supplied from the factory. The original fuse supplied is a 3 amp 125-volt type 3AG.

Failure to use the proper fuse or to install the fuse in the recommended location could cause a vehicle fire hazard. The fuse provides overload protection for the power cable and Guidepoint Control Module. The wiring installed between the fuse and primary vehicle power is not protected from overheating if a short should occur. Use care when routing the power cable and fuse. Route the cables where they will be protected and uses commonly accepted install practices for aftermarket automotive electronic devices.

There are two acceptable methods of making a wire connection: Soldering your connections (recommended); or using crimp connectors (with the use of the proper crimping tool). Regardless of the method you choose, ensure that connection is mechanically sound and properly insulated.

Never use “t-tap” connectors (poor quality mechanical type connection)

Never “twist and tape” without soldering your connection
3. Control Module and Antenna Description

3.1 Control Module Description

The Guidepoint Control Module is the “brain” and central processing point for the Guidepoint system. The control module has both a GPS receiver and a cellular modem.

The Control Module uses an integrated antenna for receiving both GPS and cellular signals.

The GPS receiver processes signal from the Navistar GPS satellites and converts the information into location, speed and heading information. The cellular modem is used to transmit that information, as well as other information about the vehicle (such as when the ignition of the vehicle is turned on or off) back to the Guidepoint servers.

3.2 Selecting the Control Module Location

The Guidepoint System is supplied with a 3 ft. power cable. The control module should be mounted so it will not be exposed to damage from people or objects. The cables that connect to the Control Module should also be routed to protect them from possible damage. The Control Module has a mounting base or flange with mounting holes. Normal installation is with these four holes and #6 or #8 sheet metal screws. The control module must be mounted where it will not be exposed to direct sunlight or excessive heat generated by the vehicle operation.

Keep the Control Module at least 6 inches from any metal on the window frame.

The control module needs to be mounted flat, with the label facing up towards the sky in order to get the best possible GPS reception to the integrated antenna.

The ideal location is below the front windshield, underneath the dash (for example, directly between the instrument cluster and the dash shroud). It can be placed anywhere under the dashboard as long as the module only has the foam of the dash between it and the windshield and there are not any metallic barriers to the GPS satellite signals.

If the vehicle window has a solid dark coating around the edge, do not place the module behind the coating. The GPS signals will travel through the clear glass but will be reduced if the window has any metallic coating or tint applied.

The built-in antenna will work best if it has a clear view to the sky and as much of the horizon as possible. Any metallic objects between the unit and the satellites will degrade the signal and reduce the overall performance.
4. Wiring and Installation

4.1 Wiring Descriptions

**Red – 12V+ Power Lead (fused)** – Connect this lead to a 12V+ wire, preferably to the vehicle’s battery. If you cannot connect it to the battery directly, other possible sources are the main fuse block panel, or in the vehicle ignition harness.

**Black - Ground Wire** – Connect this to a vehicle chassis ground. Make sure the connection is paint free and secure.

**Blue - Starter Side** – Connect this wire to the starter side of the vehicle’s starter wire.

**Orange - Key Side** – Connect this wire to the key side of the vehicle’s starter wire.

**Brown - Ignition Wire** – Connect this wire to the vehicle’s 12V+ ignition wire. It is very important that you do not connect this to the vehicle’s accessory wire. The ignition wire will read 0 volts at rest and 12V+ when the key is in the “on” and “start” positions.

**Yellow/Green - Test Output** – Use this wire to test the built-in piezo buzzer. To test the buzzer simply connect this wire to a vehicle chassis ground. Make sure to disconnect this wire once you are done testing.

4.2 Installation Tips and Best Practices

While the overall installation of the GPS-SID device typically only takes 30-45 minutes, it is more important to perform a high quality installation, even if it takes a bit more time to complete. Below are a few tips for performing an installation that meets Guidepoint’s requirements for a properly installed GPS-SID device.

- When connecting the GPS-SID wiring to the vehicle’s wiring, always use the solder and tape method. Using scotch-lock style (“t-tap”) connections or simply taping bare wires together are not acceptable solutions.

- Always use proper terminals, such as crimp-style ring terminals when securing the ground wire. **Do not ground the device to a factory ground wire or factory bolt.** When connecting the ground wire, find a solid piece of metal attached to the chassis of the vehicle, scrape the paint away and secure using a locking washer and self-drilling screw.

- The GPS-SID Control Module should always be well hidden in the vehicle. The control module should only be accessible by removing various dash panels and **should never be visible to the vehicle’s driver.** Additionally, **cable ties should always be used** to secure the module in place so that it does not come loose. Hiding and securing the control module properly will reduce the chances of tampering.

- The antenna should never be visible to the vehicle’s driver. **Make sure the antenna is underneath the plastic of the dash.** As long as there is no metal above the antenna, it should function properly.

- In certain vehicle types where the starter wire is found in the engine compartment, **never extend the blue and orange wires from the harness.** Doing so may cause damage to the vehicle’s starter and may prevent the vehicle from starting consistently. Instead, cut the tape away from the GPS-SID harness and extend the other wires going to the starter disable relay and place the relay in the engine compartment. **Never secure the GPS-SID Control Module in the engine compartment, only the starter disable relay.**

Failure to follow these simple guidelines for may result in tampering, unit failure, or both.
5. Wiring Schematic
5.1 Installation Best Practices

**Note:** Using best practices can help improve device effectiveness and increase collections by 1% or more.

For assistance on questions about installation practices, contact Guidepoint at 1-877-GPS-FIND ext. 6.

<table>
<thead>
<tr>
<th>Installation Element</th>
<th>Best Practice</th>
<th>Unacceptable Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Module Placement &amp; Mounting</strong></td>
<td>• Under dash padding where it is not visible or easily accessible with the label facing up</td>
<td>• On top of dash board</td>
</tr>
<tr>
<td></td>
<td>• Use zip ties to secure module</td>
<td>• Under metal objects</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Inside of engine compartment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Anywhere the module is visible</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Using tape to secure the module</td>
</tr>
<tr>
<td><strong>Wire Connections</strong></td>
<td>• Solder and tape</td>
<td>• Scotch locks, t-taps, twist and tape</td>
</tr>
<tr>
<td></td>
<td>• Use a ring terminal for the ground wire and connect to vehicle chassis ground</td>
<td>• Bare ground wire wrapped around a bolt</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Ground wire to a factory wire</td>
</tr>
<tr>
<td><strong>Time to Install</strong></td>
<td>• 30-60 minutes</td>
<td>• Less than 30 minutes</td>
</tr>
</tbody>
</table>
6. System Testing

Each device is equipped with two L.E.D. lights that are built into the control module used for testing the Guidepoint System. The Diagnostic Test L.E.D. is used to verify that the Guidepoint System has been properly installed and that all critical elements (power, GPS, modem, software) are working properly. If all elements are working properly, you will receive a GREEN LIGHT as outlined in Step 5.2. **IT IS REQUIRED THAT YOU TEST EACH UNIT PRIOR TO COMPLETING THE INSTALLATION AND BEFORE YOU ACTIVATE THE SYSTEM.**

6.1 Powering the Control Module for the First Time

Verify that all of your connections are secure and that the wiring harness and GAP Panel are securely plugged into their connectors. Once you have verified this, you’ll need to turn the ignition of the vehicle on to initialize the unit. Once you power the vehicle’s ignition, you’ll need to observe the Diagnostic Test L.E.D. built into the unit. The Diagnostic Test L.E.D. is used to verify that the Guidepoint System has been properly installed after being powered up. It is recommended that each system be tested prior to completing the installation.

Within ten minutes (while the ignition is on) the flash rate of the green L.E.D. will change to approximately one second off and one second on to indicate that RF coverage is present and that the GPS Receiver has established a location “lock”. If you do not get the results above, ensure proper 12-volt vehicle power, check the antenna placement and repeat the test **ALWAYS LOOK FOR THE GREEN LIGHT.**

6.2 Understanding the Diagnostic Test L.E.D.

**GREEN L.E.D. TIMING**

NO FLASH The ignition has not been turned on
OFF FOR 1 SECOND GPS Module is powered and signal is valid, Cell Module is powered, ignition is on
OFF FOR 3 SECONDS GPS Module is powered and signal is valid, Cell Module is powered, ignition is off

**RED L.E.D. BLINKING**

1 BLINK The modem is not detecting a SIM card.
2 BLINKS The modem is not detecting a cellular signal
3 BLINKS The GPS receiver is not tracking any satellites.
4 BLINKS The modem has no cellular signal AND GPS is not tracking any satellites.
5 BLINKS The modem is not detecting a SIM card and GPS is not tracking any satellites.
6 BLINKS The modem is not responding, and may be defective.
7 BLINKS The modem is not responding, and may be defective and GPS is not tracking any satellites.

6.3 Output Testing

To test built-in piezo buzzer prior to activation connect the green with yellow trace wire to ground. Once connected the outputs will function.

**Note:** After testing outputs remember to disconnect the test wire.